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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 7090641	Page	<u>1</u> of	_1_
APPLICATION NO.: 10/718,333			
SSUE DATE : August 15, 2006			
NVENTOR(S) : BIAGI et al.			
It is certified that an error appears or errors appear in the above-identified patent and the shereby corrected as shown below:	nat said L	etters.	Patent
The Assignee be changed to:			
Actis Active Sensors S.r.l. and Esaote S.p.A.			

MAILING ADDRESS OF SENDER (Please do not use customer number below):

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(12) United States Patent Biagi et al.

(10) Patent No.: US 7,090,641 B2 (45) Date of Patent: Aug. 15, 2006

(54)	ULTRASOUND IMAGE FOCUSING METHOD AND RELATIVE ULTRASOUND SYSTEM					
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See application file for complete search history.

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(57) ABSTRACT

The method comprises the phases of: sending a series of excitation ultrasonic signals to a volume being investigated. by means of an array of transducers aligned in a transverse direction (x), said ultrasonic signals propagating in depth in said volume according to a direction of propagation (y); acquiring, by means of said transducers, signals reflected from reflectors located in the volume being investigated; performing on said reflected signals a transform in the transverse direction from a spatial domain (x,y), defined by said transverse direction (x) and by said direction of propagation (y), to a first transformed domain; applying, in the transformed domain, a two-dimensional transformation, to straighten every curved image (Ip1, Ip2, Ip3) of a reflector in said volume being investigated and make it essentially orthogonal to the direction of propagation (y); compressing, in the transverse direction (x) each of the straightened curves (lm1, lm2, lm3) to concentrate said straightened image in a zone centered at the level of the position of said reflector along said transverse direction (x).

20 Claims, 24 Drawing Sheets

